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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/538,029	06/08/2005	Mauri Hillo	3397-139PUS	8918
27799	7590	04/06/2007	EXAMINER	
COHEN, PONTANI, LIEBERMAN & PAVANE			PRAKASAM, RAMYA G	
551 FIFTH AVENUE			ART UNIT	PAPER NUMBER
SUITE 1210			3651	
NEW YORK, NY 10176				
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		04/06/2007	PAPER	

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	10/538,029	HILLO, MAURI
	Examiner	Art Unit
	Ramya G. Prakasam	3651

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) Responsive to communication(s) filed on 06 February 2007.
- 2a) This action is **FINAL**.                            2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) Claim(s) 11-40 is/are pending in the application.
- 4a) Of the above claim(s) 16, 19, 25 and 28 is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 11-15, 17, 18, 20-24, 26, 27, and 29-40 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 08 June 2005 is/are: a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:
  1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 6/8/05.
- 4) Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) Notice of Informal Patent Application
- 6) Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Applicant's election without traverse of Species A, drawn to Claims 11-15, 17, 18, 20-24, 26, 27, 29-40 in the reply filed on 2/6/2007 is acknowledged.

### ***Drawings***

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the polygonal shaped rollers, as claimed in Claims 15, 18, 24, and 27 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 11-15, 17, 18, 20-24, 26, 27, and 29-40 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

5. The term "sufficient" in Claims 11 and 21 is a relative term which renders the claim indefinite. The term "sufficient" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. In particular, the limitation "an elevation sufficient to separate the rolls" is not clearly defined.

***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 21-24, 26, 27, and 29, 33-36 are rejected under 35 U.S.C. 102(b) as being anticipated by Shyr (U.S. Patent No. 5,743,375).

Shyr discloses a conveyor for transporting a roll set, comprising:

- A conveyor belt or chain running about driving and tail pulleys (See Figure 2), the conveyor belt or chain being configured to support a roll set on a top surface thereof (See Figure 2);

- An elevating roll assembly (72, 76 – See Figure 8) positioned below a portion of the top surface of the conveyor belt or chain and operable to form on the top surface of the conveyor belt or chain an elevation sufficient to separate the rolls of the roll set from each other when the rolls of the roll set are transported by the conveyor belt or chain over the elevation (See Figure 8).
- Wherein the elevating roll assembly comprises at least one rotatably mounted elevating roll (See Figure 8).
- Wherein the elevating roll assembly comprises two elevating rolls adapted to operate in succession along a travel direction of the conveyor (See Figure 8).
- Wherein the at least one elevating roll is a polygonal elevating roll (See Figures 1 and 8).
- Wherein the at least one elevating roll is a roll rotating eccentrically (See Figure 8).
- A means for adjusting the elevation (See Figure 8 – as the rolls rotate around the sprocket, the elevation is adjusted).
- Wherein the elevating roll comprises two wheels (See Figure 8) and a spacer member (See Figure 7 – connection between the two weels), one of the two wheels being on each side of a longitudinal center line of the conveyor belt or chain, the two wheels being rotatably supported with as the spacer member mounted therebetween (See Figures 7 and 8).

***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 11-15, 17, 18, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shyr in view of Ruohio (U.S. Patent No. 5,655,425).

Shyr discloses a method for separating articles traveling on a conveyor from each other, the conveyor comprising a conveyor belt or chain running about driving and tail pulleys (See Figure 2), comprising:

- Transporting the article on a top surface of said conveyor belt or chain (See Column 2, lines 16-24);
- Forming onto the top surface of the conveyor belt or chain an elevation sufficient to separate the rolls from each other when the rolls of the roll set are transported over the elevation (See Figure 8).
- Wherein the elevation is formed with an elevating roll assembly adapted to operate below the top surface of the conveyor belt or chain and comprising at least one rotating elevating roll (See Figure 8).
- Wherein a height of elevation between the top surface of a base level of the conveyor belt or chain and a top level of the elevation is adjusted during operation of the conveyor, the base level of the conveyor being a level of the conveyor upstream of the elevation (See Figure 8 – as the rolls rotate around the sprocket, the elevation is adjusted).
- Wherein at least one of the at least one elevating roll is a polygonal elevating roll (See Figures 1 and 8).

- Wherein at least one of the at least one elevating roll is a roll rotating eccentrically  
(See Figure 8).

Shyr, however, does not explicitly disclose that the articles be rolls in a roll set. Ruohio discloses the transport of rolls in a roll set for the purpose of manufacturing rolls at paper mills (See Column 1, lines 14-50). It would have been obvious to utilize the method in Shyr to transport rolls in a rolls set for the purpose of manufacturing rolls at paper mills.

10. Claims 30-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shyr in view of Santandrea (U.S. Patent No. 5,060,780).

Shyr discloses all claimed limitations (See Above), except for a conveyor wherein a height difference between the top surface of a base level of the conveyor and the top level of the conveyor is 2 to 6mm. Santandrea discloses a conveyor wherein a height difference between the top surface of a base level of the conveyor and the top level of the conveyor is 2 to 6mm (See Column 23, lines 3-17) for the purpose of creating a small enough distance such that waste materials would not be found between the conveyed item and the base of the conveyor (See Column 23, lines 17-22). It would have been obvious to a person of ordinary skill in the art at the time of applicant's invention to modify Shyr by utilizing a conveyor wherein a height difference between the top surface of a base level of the conveyor and the top level of the conveyor is 2 to 6mm for the purpose of creating a small enough distance such that waste materials would not be found between the conveyed item and the base of the conveyor.

11. Claims 37-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shyr.

Shyr discloses all claimed limitations, except that the length of the elevation explicitly be is 150 to 250mm. A change in the size of a prior art device is a design consideration within the

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skill of the art. In re Rose, 220 F.2d 459, 105 USPQ 237 (CCPA 1955). It would be obvious to change the length of elevation to 150 to 250mm in order to change the design of the conveyor.

12. Claims 39-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shyr in view of Santandrea.

Shyr in view of Santandrea discloses all claimed limitations, except that the length of the elevation explicitly be is 150 to 250mm. A change in the size of a prior art device is a design consideration within the skill of the art. In re Rose, 220 F.2d 459, 105 USPQ 237 (CCPA 1955). It would be obvious to change the length of elevation to 150 to 250mm in order to change the design of the conveyor.

***Conclusion***

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ramya G. Prakasam whose telephone number is (571) 272-6011. The examiner can normally be reached on Monday - Thursday, 8:30am-7pm EST.

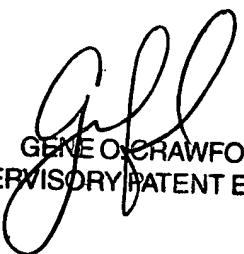
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gene Crawford can be reached on (571) 272-6911. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

3/31/2007

RGP

  
GENE O'CRAWFORD  
SUPERVISORY PATENT EXAMINER